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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/536,523	11/30/2005	Thomas Garoff	05-370	9469

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EXAMINER
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MCDONOUGH, JAMES E

ART UNIT	PAPER NUMBER
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1755

MAIL DATE	DELIVERY MODE
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09/17/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/536,523

**Applicant(s)**

GAROFF ET AL.

**Examiner**

James E. McDonough

**Art Unit**

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3,5,9-15,17-27,29-40 and 48-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5, 9-15, 17-27, 29-40, and 48-57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Applicants argument on page 10, section 1., of the reply filed 7/17/2007, is found persuasive therefore, it has been withdrawn.

### **Original Rejection**

#### **35 USC 102:**

Claims 1, 3, 5, 9-15, 17-27, 29-40, 42-46, and 48-57 are rejected under 35 USC 102(b) as being anticipated by Gessell (US 4,496,660) and Garoff (WO 01/55230).

#### **35 USC 103:**

Claims 1, 3, 5, 9-15, 17-27, 29-40, 42-46, and 48-57 are rejected under 35 USC 103(a) as unpatentable over WO 99/5574.1 (Vereecke).

### **Response to Arguments**

Applicants argue against the 102 rejection over Gessell.

Applicants argue that there is no disclosure of the Mg/Al ratio, however this is unpersuasive because at column 2, line 5 to column 4, line 35, Gessell clearly teaches ratios of Mg/Al that would read on the instant application, albeit they are not described in the same manner, but one skilled in the art would be able to understand that they overlap.

Applicants argue that since the reference did not do a chemical analysis after each step, it can not possibly have the same Mg/Al ration. This is not persuasive for

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obvious reasons, such as a cup of water would contain  $H_2O$  even if the person holding it does not do a chemical analysis of it.

Applicants argue that the reference uses an additional step (adding  $TiCl_4$ ) that is not necessary, however applicants use comprising language, so this in no way detracts from the ability of the reference to disclose the instant invention.

Applicants then argue that this is done to insert a reducing agent, and the instant application can add  $TiCl_4$  without a reducing agent. However, as stated above the claim uses comprising language, and furthermore, examiner ask where is the reducing agent?

Applicants argue that the instant invention a solid reaction product is obtained by reaction of magnesium compound with aluminum compound and in example 22 of Gessell these compounds are in the same solvent (hexane). This is not persuasive because: 1.) When Gessell is read carefully it can be seen that Gessell does not say what solvents the Mg and Al are in only that so many ml of solutions of each are used, Gessell also dose not say that the reaction product has not started to precipitate out of solution. 2.) Gessell also makes solid reaction products.

Applicants argue that Gessell need an extra halide source to precipitate. This is not persuasive because Gessell does not teach that the halide source is needed for precipitation.

Applicants argue that the order of addition is of great relevance and that it is the examiner that has the burden of proof of showing the same results would be achieved by changing the order of addition. This is flatly wrong, as it is the applicants who

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shoulder the full burden of proof of showing of unexpected results for changing order of addition.

Applicants then try to argue that there is a big difference between adding acid to water versus adding water to acid. This is not persuasive because first this is a very poor analogy since the product of the addition would be exactly the same no matter what order of addition is taken. The only reason for adding acid to water is for safety reasons and product distribution or properties of resulting solutions.

Applicants then try to further argue that the addition order of a chemical reaction is always crucial with respect to the result achieved. This is patentably false and found to be not persuasive because it is the examiners position that the majorities of all chemical reactions do not care if A is added to B or B is added to A, there are only rare examples where this is the case and most often happens when several reagent are being added in sequence such as A+B then add C or A+C then add B, in this case we are talking about two reagents and the burden of proof is clearly on the applicants and not the examiner, as alleged by applicants.

Applicants argue that the instant application always uses an aluminum halide, where the reference use an alkyl aluminum and show the formula  $(Al(R_1)_yCl_{3-y}; y < 3)$ . This is not persuasive because a reference is not limited to the preferred embodiments and clearly Gessell teaches at column 1, lines 30-35 the use of aluminum halides, furthermore, the halide source would serve to form aluminum halide in situ, which, would still read the claims as they use comprising language.

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Applicants argue that the washing step is not done to adjust the Al/Mg ratio. This is not persuasive because if the hexane wash affects the Mg/Al ration in the instant application then it will also do so in the reference even if it was not recognized at the time.

Applicants allege that the instant invention has superior morphology, but two similar or identical compositions made in similar or identical ways would be expected to have similar or identical properties absent the showing of any evidence to the contrary.

Applicants argue against the 102 rejection over Garoff.

Applicants argue that the Mg compound used is different because it has an extra coordinated alcohol and their compound does not contain any additional alcohol. This is not persuasive because the instant application is adding alcohol, which, will form in situ an adduct with an extra alcohol the same as what is added in the reference.

Applicants argue that in Garoff no precipitation occurs. This is not persuasive because in the preceding paragraph the applicants state that the reference teaches that precipitation can be prevented by adding toluene, so it is not understood how applicants argue in one paragraph that something happens in a reference then in the very next paragraph argue that it does not, applicants appear to be possibly confusing the references.

Applicants then argue that the Mg-ROH compound from Garoff is the same as that in the instant invention, this contradicts the earlier argument that they are the same

Applicants argue that Garoff is silent as to washing to adjust the Mg/Al ratio. This is not persuasive because Garoff washes a similar or identical composition with the exact same solvent, so if it adjust the ratio of Mg to Al in the instant invention, then it would be expected to do the same in the reference, absent any evidence to the contrary.

Applicants then argue that "it is not known what happens during the hexane treatment". This is not persuasive because the same thing will happen in both hexane washes.

Applicants argue against the 103 rejection over Vereecke.

Applicants argue that Vereecke teaches against the "reverse" order or the order claimed, and states that poor morphology is obtained. However, this is not a true teaching away situation as Vereecke does not teach that it will not work only that it is not preferred, but even if Vereecke teaches that it is not preferred, Vereecke teaches it as submitted by applicants own admission.

Applicants argue that that the reference uses a different Mg compound offers the formula  $(Mg(OR_1)_{2-n-x}(R_1)_nX_x; 0 < n < 2; n \text{ is never } 2, \text{ i.e. } 2-n-x \text{ can never be zero.}$  Applicants claims clearly show that there is an additional limitation in their equation that was left out stating  $x < 2$ . Simple arithmetic shows that both  $n$  and  $x$  can be at least 1. As it is well settled in the field of mathematics that  $1 + 1 = 2$ , and furthermore, that  $2 - 2 = 0$ , and even further that  $2 - 1 - 1 = 0$ . It follows that,  $2-n-x$ , can indeed be 0.

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Applicants argue that since Vereecke washes his composition any reducing activity is washed away. This begs the question, if the reducing power is washed away in the reference how does it remain in the instant invention?

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James E. McDonough whose telephone number is (571)272-6398. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571)272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JEM 9/10/2007

  
J.A. LORENGO  
SUPERVISORY PATENT EXAMINER